

Dear Bill,

Admittedly I am a scoundrel, a louse, a rat, etc. etc.; however, there

are extenuating circumstances. The first of these explains why I haven't

answered you sooner. You see, I didn't stay in Louisville for the summer,

but went to Buffalo instead. Mother didn't know exactly where I was staying

when your letter arrived, and the result was that the letter made two trips

between Louisville and Buffalo. It would have come quicker by my personal

carrier pigeon. My humble apologies for that delay.

Now ~~xxxxxx~~ to defend myself on some other counts. Both you and

Mr. Benham are after my scalp- and I can understand why. I have procrastinated

miserably. However- I did spend "a little time" around WHAV before I finally

left. Nearly 120 hours of steady work, by my calculations. By June 10

I was suffering from lack of sleep, malnutrition, and homesickness (even

with Wendy poking her head in the studio on rare occasions) Sunday afternoon

my parents wired to know where the hell I was, and I left that night. I'm

mightily surprised the station works at all. It seemed to be balanced on a

tightrope at the time- ready to break down all over the place at any moment.

Enough of these excuses. I want to work a lot more on the thing, and

get it fixed the way we planned- inside and out, looks and works. I hardly

expect anyone to accomplish much without some explanation from me, so don't

feel bad if things aren't improved by the end of the summer. The plans are

still chiefly in my head. I'll unearth as many as I can now. I forget a

lot.

First let me say that I don't know anything about the RME. Write the

manufacturer for whatever dope he can provide. They will be very slow and

snooty about answering you, so maybe I better do it. Du Pont stationery has

better pull than WHAV. There may be some more technical data relating to

WHAV in my closet in Founders. Lyle Settle will let you in there, or in

my room to look for it. We have only a report by Sevringhouse, a collection of IBS reports, and an ARRL handbook for a reference library. I'll have added quite a bit to that by the summer's end. I suggest you order a copy of Borst's book; also send me the hectographed lists of pertinent articles which are scattered through the IBS reports. These will save me some hunting.

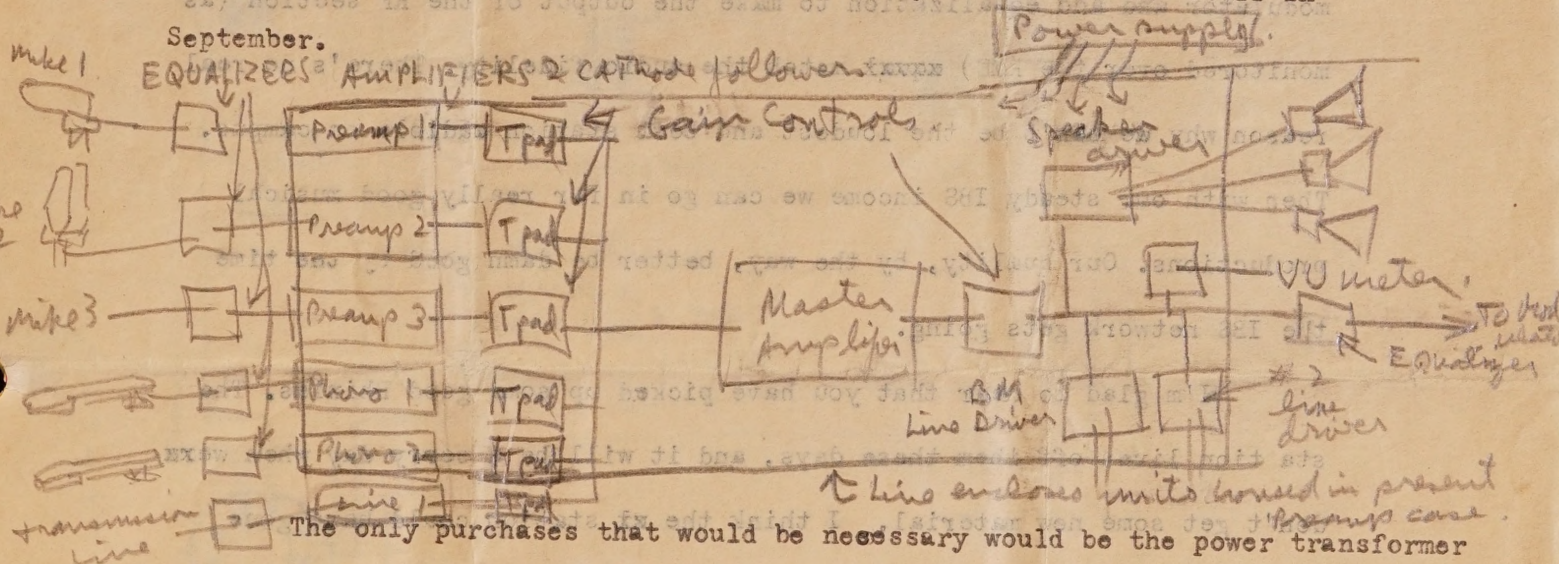
The crystal cartridge on that pickup is shot. You can get a replacement without priority, if you return the old cartridge. Get a good quality cartridge- an exact duplicate if possible.

I don't know where to start on the tale of woe which is WHAV. I don't know how much you've diddled with it, but by this time you may have discovered that the battery lights the control panel lights, ~~xxxxxxx~~ that the lights in the studio don't work, but the mike switches do after a fashion. Don't leave the battery on, or use it at all until somebody builds a trickle charger for it. better check its condition with a garage man, and leave it until said charger is in operation. Please find out what is wrong with the warning lights. The trouble is in the BX going to the studio, I think. It's not in the relay box. Check continuity, and rewire the warning light panel with good rubber covered power wire, soldering all joints. Better check those sockets too; they're ancient, and probably should be retired. Go ahead with circuit breaker, two boxes by the transmitter, and one in the corner where the wires were dangling around short circuiting. You might also run wires for a ceiling fixture in each studio, but don't buy the fixtures until we determine whether fluorescent is noisy or not.

Yes, the preamp is full of bugs. It was much better in the Physics lab than in the Union, but it's always that way. The first thing that needs to be done is to replace the master gain control, and the two phono gain controls. These were salvaged, and are in terrible shape. Get Centralabs, $\frac{1}{2}$ megohm, linear taper jobs like the ones in the mike channels. Just replacing the master gain control may solve the gain difficulty. Don't go to a lot

Diagram B. Relay Box.

0 trouble over the thing, because it's only a temporary setup. I am working this summer in an electronics laboratory, and have access to some beautiful instruments. Now here's the plan. I want to design and build a really high fidelity system for both studios. I don't have to buy many parts for experimental purposes, but naturally I can't swipe thirty or forty dollars worth of stuff from the plant. I would like to build up an amplifier system as outlined below, ~~xxx~~ run tests with our audio equipment to make sure its good, and then send it to you. I would be ready to install the stuff in September.



The only purchases that would be necessary would be the power transformer and chokes. The rest we have at the lab. Will you bring this up in the higher councils of WHAV, and get me authorization to spend \$10-\$15 for parts? All components of our present amplifiers will be used for the remote amplifiers we plan to install in the gym and music room. I am sending a complete accounting of the money I spent previously - I hope Jud will be happy. He won't, because he owes me \$9.95.

As you can see, each mike ~~will~~ and pickup will have its own preamp unit, which will plug into the power supply and master ~~gain~~ amplifier units. All amplifiers will be stabilized with negative feedback. The mike preamps will ~~xxxx~~ will be equalized for best response from a particular mike- the Turner 211, say, will always be connected into channel 1. A cathode-follower stage will give us a low- impedance output from each preamp, which can be fed into a constant-impedance attenuator (gain control).

my room to let us have a listening house, a collection

The master amplifier will be perfectly straightforward- maybe push-pull

for more power- and so too for the ~~mi~~ speaker driver. The outputs can

again be cathode followers, which give better frequency response than any

coupling transformers we could possibly afford. (Good ones are \$14 to \$25)

I think the whole system could be made flat from 40 to 15,000 cycles, which

is standard for F-M stations. The monitor speakerx would tell us what

is coming out of the audio part of our studio. We could then juggle the

modulator and add equalization to make the output of the RF section (as

monitored over the RME) ~~approx~~ match the audio fidelity. There's no real

reason why we can't be the loudest and best station audible on campus.

Then with our steady IBS income we can go in for really good musical

productions. Our quality, by the way, better be damn good by one time

the IBS network gets going.

I'm glad to hear that you have picked up some good Rhinies. The

sta tion lives off them these days, and it will be a sorry day when we

don't get some new material. I think the ~~mi~~ station could have gone

places this summer with decent equipment- and I'm sorry I didn't try soon

enough and hard enough to provide it. Sex, you will admit, is necessary,

though.

I'm getting awfully sleepy, and there's still ~~Jud~~ to be satisfied.

Let me hear from you-

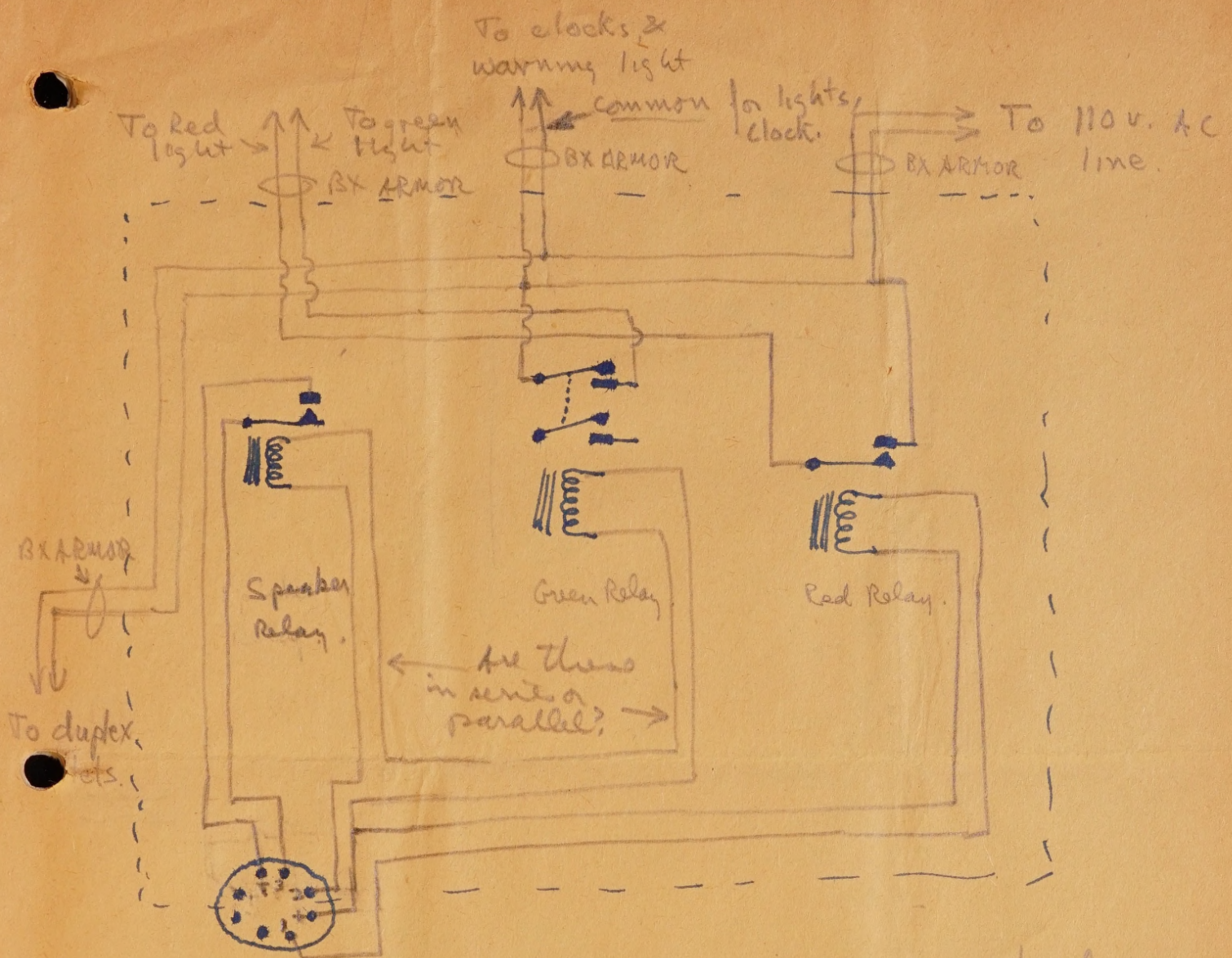
88 - over- out-

Dick

P.S. Pardon Pencil - any pencils, pennyles

P.P.S. Buffalo is loaded with sheet pakebite, relays,
sheet aluminum - all dirt cheap. Also pickups,
cabinets, meters, mikes, transformers, chokes, etc
at standard prices. Any offers?

Diagram B. Relay Box.



Numbers correspond to those on control panel disconnect, do not indicate socket hole numbers. See note on other diagram.

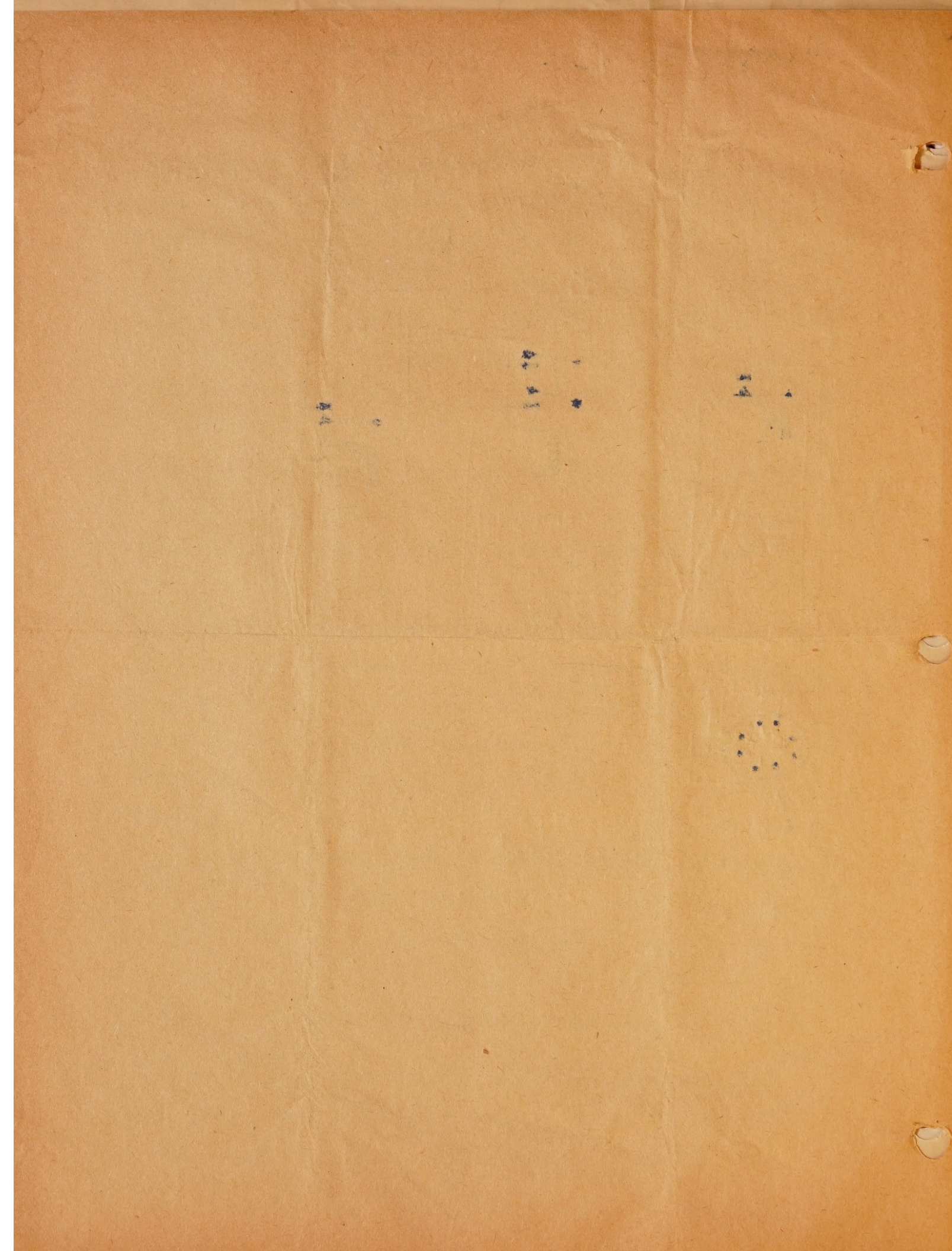
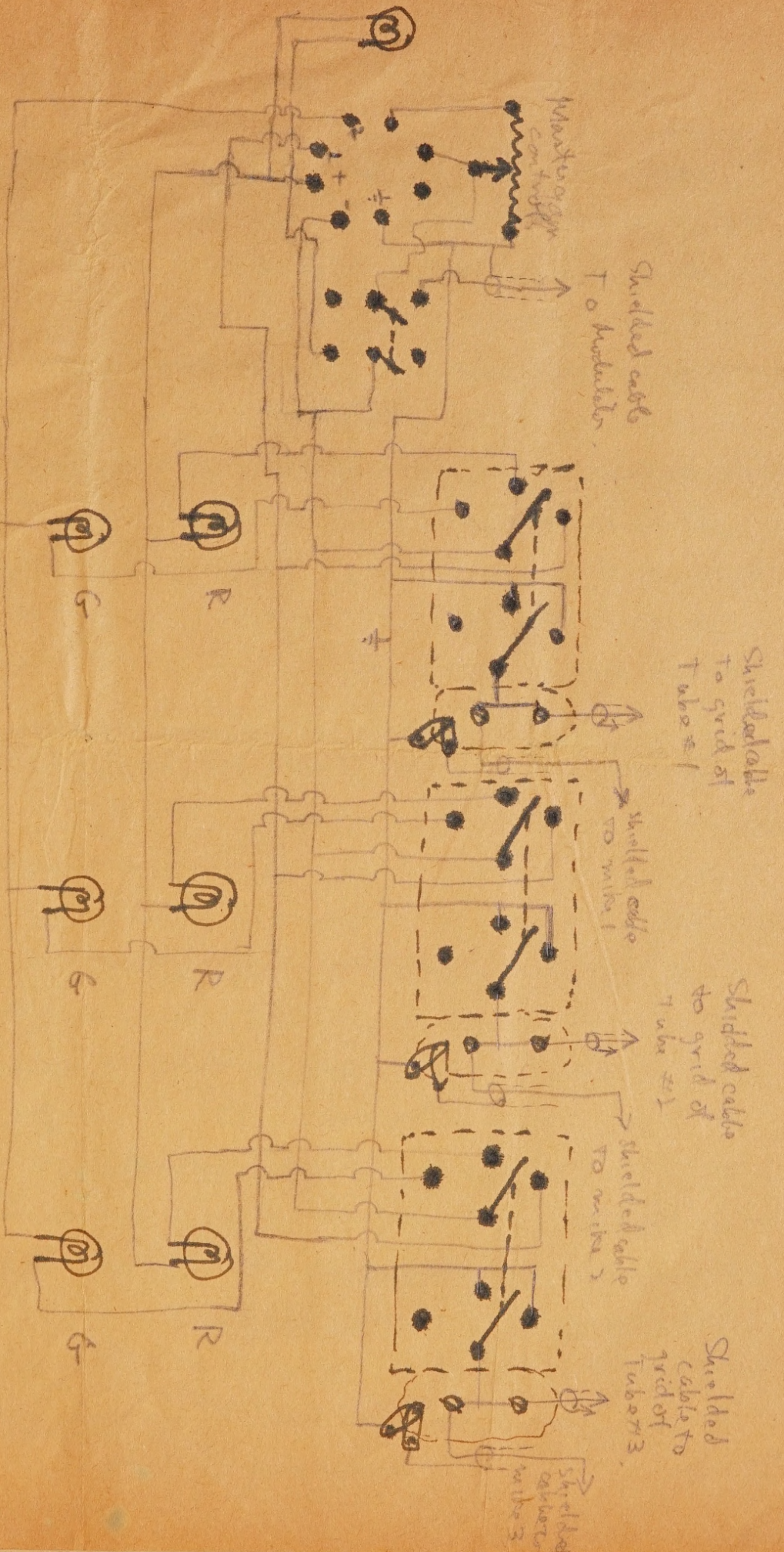
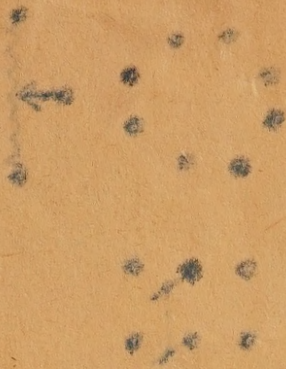


Diagram of Control Panel



Note: I can't remember which
 pins of the diodes plug go to
 which wires on the control
 panel. You can trace this out,
 and redraw above diagram.



my dear

